Digital Signage Player
(Fan-less, Core-i7 620UE, SSD, Dual DVI-D)
DS-960D-DC7413 **Product Guide**

CONTEC CO.,LTD.

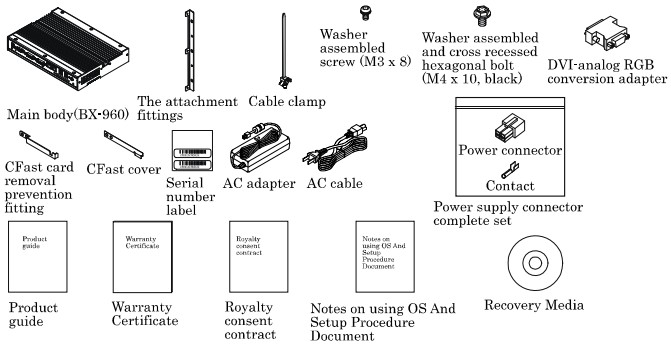
Please make sure to read "Precaution List" before using this product to use rightly.

Product Configuration List

Name		DS-960 Pcs.
The main body *1*2		1
The attachment fittings		2
CFast card removal prevention fitting		1
CFast cover		1
Washer assembled screw (M3 x 8)		7
Washer assembled and cross recessed hexagonal bolt (M4 x 10, black)		6
Cable clamp		1
Power supply connector complete set	Power connector	1
	Contact	4

Name	DS-960 Pcs.
AC adapter*3	1
AC cable *4	1
DVI-analog RGB conversion adapter	1
Product guide (this sheet)	1
Warranty Certificate	1
Serial number label	1
Royalty consent contract	1
Notes on using OS And Setup Procedure Document	1
Recovery Media	1

*1 Please refer to user's manual of BX-960 from our website in order to know the specification of the main body.
*2 Please refer to user's manual of "PC-SSD16GS-L" in order to know the specification of installed SSD.
This manual is available from DS-960 special page in our website.
*3 Please refer to user's manual of "ACAP12-06" in order to know the specification of an AC adapter.
This manual is available from DS-960 special page in our website.
*4 Do not use this AC power cable with any devices except for an attached AC adaptor.

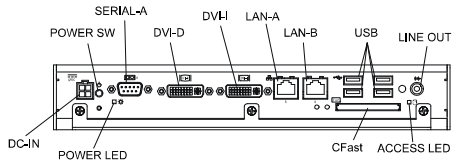


Inquiry

Contact your retailer

Component Name

Front View



Overview

This is STB for signage, working with dual-core CPU Intel® Core™ i7 processor and high-performance embedded GPU.
ATI Radeon™ E2400 helps Full-HD movie to be played smoothly. It supports Full-HD output via dual screen. It has 128MB graphic memory. It supports DirectX 10 / Shader Model 4.0. Its UVD(Universal Video Decoder) accelerates H.264 and VC-1 format movie.
CFast card can be installed as storage. The body is so compact and supports SATA interface which can transport data at high speed. It enables you to read high-quality movie, store so big data and transport data at high bit rate.

Installed OS

POSReady7

How to Setup

<STEP1> Connect cables.
Connect the cable to the necessary external devices, such as a USB keyboard, a USB mouse and a display.
<STEP2> Turn on the power.
Follow these steps in order to power on. If you find any abnormality after turning on the power, turn it off and check to see if the setup has been performed properly.
- Make sure that the AC power cable is not plugged into a wall outlet.
- Connect the AC power cable to the connector of AC adaptor.
- Connect the DC cable of AC adaptor to the DC power supply connector of DS-960.
- Plug the AC power cable into a wall outlet.
* This product supports +12VDC power ONLY. Use an attached AC adapter, or prepare other +12VDC power supply.

<STEP3> OS wakes up.
POSReady7 wakes up automatically after power-in. Other special operation such as switch-on is not necessary.

Specification

Table1 Functional Specification

Model			DS-960
CPU			Intel® Core™ i7 Processor 620UE 1.06GHz
Chipset			Intel® QM57
BIOS			Manufactured by Insyde
Memory			4GB, 204pin SO-DIMM socket x 2, PC3-6400(DDR3 800)DDR3 SDRAM
Graphic Controller			ATI Radeon™ E2400
Interface			
	Display		DVI-I x 1 (29-pin DVI-I connector), DVI-D x 1 (25pin DVI-D connector) DVI-analog RGB conversion adapter is attached
	Audio		HD Audio-compliant, Line-out x 1, 3.5 φ Stereo mini jack, Full-scale output level 1.2Vrms (Typ.)
	CFast card slot		2-slots (CFast1 / CFast 2), CFast CARD (Type I) x 2, bootable
	Serial ATA		1-slot, slot-in system, Corresponding to serial ATA 2.0 standard port, SSD is installed (16GB, 1 partition)*1,
	LAN *2		2 ports (RJ-45 connectors) LAN-A: Intel 82577LM controller, LAN-B: Intel 82574L controller 1000BASE-T/100BASE-TX/10BASE-T, Wake On LAN support
	USB		4 ports (TYPE-A connector x 4), USB 2.0-compliant
	RS-232C		1 port (9-pin D-SUB connector [male]), Baudrate: 50 - 115,200bps
Power supply		Rated input voltage	12 VDC *3
		Range of input voltage	10.8 - 13.2VDC
		Power consumption	12V 5.0A (Max.)
Physical dimensions (mm)			270(W) x 194(D) x 44(H) (No protrusions)
Weight			About 2.7kg

*1 The capacity of disk is a value when 1GB is calculated by 1 billion bytes. The capacity that can be recognized from OS might be displayed fewer than an actual value.
*2 If you use the 1000BASE-T, be careful of the operating temperature referring to "Environment Requirements" below.
*3 Use a power cable shorter than 3m.

Table2 Environment Requirements

Model		DS-960
Operating temperature *4		(1) Vertical installation (where left surface is at bottom): 0 - 45℃ (With 1000BASE-T: 0 - 40℃) (2) Installation other than above: 0 - 40℃(With 1000BASE-T: 0 - 35℃)
Storage temperature		-10 - 60℃
Humidity		10 - 90%RH (No condensation)
Floating dust particles		Not to be excessive
Corrosive gases		None
Line-noise resistance	Line noise	AC line / ±1kV *5, Signal line / ±1kV (IEC61000-4-4 Level 3, EN61000-4-4 Level 3)
	Static electricity resistance	Contact discharge / ±4kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2), Atmospheric discharge / ±8kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)
Vibration resistance	Sweep resistance	10 - 57Hz/semi-amplitude 0.15 mm 57 - 500Hz/2.0G, 40 min. each in x, y, and z directions (JIS C 60028-2-6-compliant, IEC 60068-2-6-compliant)
Impact resistance		10G, half-sine shock for 11 ms in x, y, and z directions (JIS C 60068-2-27-compliant, IEC 60068-2-27-compliant)
Grounding		Class D grounding (previous class 3 grounding), SG-FG / continuity

*4 For more details on this, please refer to chapter 3, "Installation Requirements" of BX-960 user's manual. This manual is available from our web site.
*5 When an attached AC adapter is used.

Battery

Battery Specification

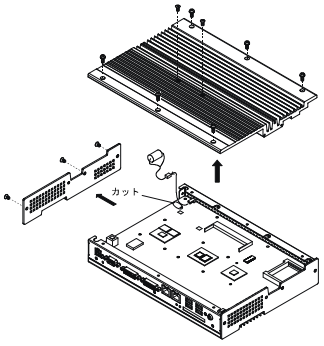
This product uses the following battery.
- Type : Lithium primary battery
- Model : BR-1/2AA
- Maker : Panasonic
- Nominal voltage : 3V
- Nominal capacity : 1000mAh
- Lithium content : 1g or less

Disposing the battery

Dispose the removed battery properly in accordance with local requirements.

Removing the battery

Remove the battery according to the following figure.



Safety Precautions

Users of this product should understand the following definitions and precautions in order to use the product safely.

Safety Information

This document provides safety information using the following symbols to help prevent accidents resulting in injury and/or death and the destruction of equipment and resources. Users should understand the meanings of these labels to operate the equipment safely.

⚠ DANGER	DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
⚠ WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or in property damage.

Disclaimer

- CONTEC disclaims any and all liability for any damages arising from fire, earthquake, other acts of God, intentional acts or negligent or inappropriate use of Contec products.
- CONTEC disclaims any and all liability for consequential, special, or other indirect damages including but not limited to the loss of profits, the suspension or interruption of any business, and/or the loss of any data caused by the use of Contec products.
- CONTEC disclaims any and all liability for any damages arising from the combinationnal or other errors caused by the use of Contec products with other devices.

Caution on the DS-960 Series

Handling Precautions

⚠ WARNING

- Do not use where combustible or corrosive gases are present. This may cause explosion, fire, electrical shock or equipment failure.
- In case of abnormal operation (smoke, unusual odor or sound), immediately turn the power switch off, unplug the power supply from the socket, and inform your CONTEC representative. Using equipment in this condition may cause fire or electrical shock.
- To avoid danger of electrical shock or burns, never remove the screws or covers except from specified locations.
- Do not touch the power switch or plug with anything that is wet. This presents danger of electrical shock.
- Avoid installation in unstable areas, or incomplete installation. This can lead to damage from falling equipment.
- Always use this equipment at the designated voltage. Use with power supplies outside the designated voltage may cause fire or electrical shock.
- Users should not attempt to disassemble or modify this equipment, or to replace components. The manufacturer may not be able to provide service for equipment that has been modified by the user. If worn out or broken components must be replaced, notify your CONTEC representative.
- Do not attempt to replace the battery as inappropriate battery replacement poses a risk of explosion.
- For battery replacement, contact your retailer as it must be performed as a process of repair.
- When disposing of a used battery, follow the disposal procedures stipulated under the relevant laws and/or municipal ordinances. For details on removing battery, refer to the section above entitled "Battery".
- Always check that the power supply is turned off before connecting or disconnecting power cables.
- This product is not intended for use in aerospace, space, nuclear power, medical equipment, or other applications that require a very high level of reliability. Do not use the product in such applications.
- If using this product in applications where safety is critical such as in railways, automotive, or disaster prevention or security systems, please contact your retailer.

⚠ CAUTION

- Do not use or store this product in a location exposed to high or low temperature that exceeds range of specification or that is susceptible to rapid temperature changes.
  Example: - Exposure to direct sun - In the vicinity of a heat source
- Do not use this product in extremely humid or dusty locations. It is extremely dangerous to use this product when it is in concact with water or any other fluid or conductive dust. If this product must be used in a dusty environment, install it on a dust-proof control panel, for example.
- Avoid using or storing this product in locations subject to shock or vibration that exceeds range of specification.
- Do not use this product in the vicinity of devices that generate strong magnetic force or noise. Such products will cause this product to malfunction.
- Do not use or store this product in the presence of chemicals.
- To clean this product, wipe it gently with a soft cloth dampened with either water or mild detergent. Do not use chemicals or a volatile solvent, such as benzene or thinner, to prevent pealing or discoloration of the paint.
- This product's case may become hot. To avoid being burned, do not touch the case while this product is in operation or immediately after turning off the power. Avoid installation in a location where people may come into contact with the case.
- CONTEC does not provide any guarantee for the integrity of data on any recording media such as SSD and CFast.
- Always remove the power cable from the power outlet before changing hardware configurations such as the connection of connectors, and/or the setting of jumpers and switches.
- To prevent corruption of files, always shutdown the OS before turning off this product.
- CONTEC reserves the right to refuse to service a product modified by the user.
- In the event of failure or abnormality (unusual smells or excessive heat generation), unplug the power cord immediately and contact your retailer.
- To connect with peripherals, use a grounded, shielded cable.
- The CFast card connector doesn't support a hot plug. The CFast card cannot be removed or inserted if the power supply is ON or the product may malfunction or fail.
- When you turned the power switch off, wait for another 5 or more seconds before turning it on.
- This product screen may not display unless the power to the display is turned on before turning on the DS-960.
- In some USB devices, current flows backward to the DS-960 through the connection cable when turning on the DS-960. If you connect to those devices, the DS-960 may not start if the 5V power is not turned off. In such cases, connect it again after having detached the USB device and turned the power on.
  (When you use the USB device as the boot one, connect it before detecting the device.)
- When transporting this equipment, be careful to protect it against direct vibration and physical shock.
- Component Life:
  (1) Battery ---The internal calendar clock and CMOS RAM are backed by a Lithium primary battery. The backup time at a temperature of 25°C with the power disconnected is 10 years or more.
  (2) SSD ---It uses a SSD as OS storage area. Flash cell Program/Erase cycles are 100,000 cycles. MTBF is 2,000,000 hours.
  (3) AC adaptor ---An AC adaptor is attached. The predicted life is 5 years operating at 25°C. MTBF is 60,000 hours at 25°C.
  * Replacement of expendables or consumable items is handled as a repair (there will be a charge).
  * Estimates of component life are not guaranteed but are for reference only.

FCC PART 15 Class A Notice

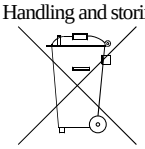
NOTE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference at his own expense.

WARNING TO USER

Change or modifications not expressly approved the manufacturer can void the user's authority to operate this equipment.

Handling and storing the battery in E U signatory countries



Note: This symbol mark is for EU countries only.
This symbol mark is according to the directive 2006/66/EC Article 20 Information for end-users and Annex II.

This symbol means that batteries and accumulators, at their end-of-life, should be disposed of separately from your household waste.
If a chemical symbol is printed beneath the symbol shown above, this chemical symbol means that the battery or accumulator contains a heavy metal at a certain concentration.
This will be indicated as follows: Hg: mercury (0.0005%), Cd: cadmium (0.002%), Pb: lead (0.004%)
These ingredients may cause serious hazards for humans and the global environment. Please refer to the user's manual for the annulment of detaching a detailed battery specification and the battery and the batteries.

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